

## REMARKS

Please cancel Claim 14 without prejudice. Claims 1-13 and 15-23 are pending. Claims 1, 10 and 17 are amended herein. No new matter is added as a result of the claim amendments.

### 112 Rejections

The instant Office Action states that Claims 1-13 and 15-16 are rejected under 35 U.S.C. § 112, second paragraph, because the term “can be” in independent Claims 1 and 10 is indefinite. Applicants respectfully submit that Claims 1 and 10 as amended herein overcome the rejection under 35 U.S.C. § 112, second paragraph, and consequently Claims 2-9, 11-13 and 15-16 dependent on Claims 1 and 10 also overcome this rejection.

### 103 Rejections

#### Claims 1-4, 6, 8-13, 15-19 and 22-23

The instant Office Action states that Claims 1-4, 6, 8-13, 15-19 and 22-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ryan et al. (“Ryan;” U.S. Patent No. 6,311,149). The Applicants have reviewed the cited reference and respectfully submit that the present invention as recited in Claims 1-4, 6, 8-13, 15-19 and 22-23 is not shown or suggested by Ryan.

Applicant respectfully submits that Ryan does not show or suggest “A multi-functional device comprising: a bus; a random access memory (RAM) coupled to said bus; a central processing unit (CPU) coupled to said bus; and a plurality of analog blocks coupled to said bus, wherein said bus, RAM, CPU and analog blocks reside on a single chip” as recited in independent Claim 1

(emphasis added). Claims 2-4, 6 and 8-9 are dependent on Claim 1 and recite additional limitations.

Applicants also respectfully submit that Ryan does not show or suggest an array of analog blocks that includes “a second plurality of analog blocks comprising switched capacitor blocks, ... wherein said switched capacitor blocks comprise a first type and a second type, wherein said first type is adapted to receive a first set of inputs and wherein said second type is adapted to receive a second set of inputs different from said first set” as recited in independent Claim 10 (emphasis added). Claims 11-13 and 15-16 are dependent on Claim 10 and recite additional limitations.

Furthermore, Applicants respectfully submit that Ryan does not show or suggest “A multi-functional device comprising: a plurality of analog blocks arranged in an array having multiple columns and rows, ... wherein analog blocks in a column are each coupled to a digital bus” as recited in independent Claim 17 (emphasis added). Claims 18-19 and 22-23 are dependent on Claim 17 and recite additional limitations.

Therefore, Applicants respectfully submit that Ryan does not show or suggest the claimed features of the present invention as recited in independent Claims 1, 10 and 17, and that these claims are in condition for allowance. Applicants also respectfully submit that Ryan does not show or suggest the additional claimed features of the present invention as recited in Claims 2-4, 6 and 8-9 dependent on Claim 1, Claims 11-13 and 15-16 dependent on Claim 10, and Claims 18-19 and 22-23 dependent on Claim 17,

and that Claims 2-4, 6, 8-9, 11-13, 15-16, 18-19 and 22-23 are in condition for allowance as being dependent on allowable base claims. As such, the Applicants respectfully assert that the basis for rejecting Claims 1-4, 6, 8-13, 15-19 and 22-23 under 35 U.S.C. § 103(a) is traversed.

#### Claims 5 and 20

The instant Office Action states that Claims 5 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ryan in view of either Swanson (U.S. Patent No. 6,590,517) or Anderson (U.S. Patent No. 5,493,246). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 5 and 20 is not shown or suggested by Ryan in combination with either Swanson or Anderson.

Claim 5 is dependent on independent Claim 1 and recites additional limitations. Claim 20 is dependent on independent Claim 17 and recites additional limitations. As presented above, Applicants respectfully submit that Ryan does not show or suggest the present invention as recited in Claims 1 and 17.

Applicants respectfully submit that neither Swanson nor Anderson overcome the limitations of Ryan. Specifically, Applicants respectfully submit that neither Swanson nor Anderson, alone or in combination with Ryan, show or suggest "A multi-functional device comprising: a bus; a random access memory (RAM) coupled to said bus; a central processing unit (CPU) coupled to said bus; and a plurality of analog blocks coupled to said

bus, wherein said bus, RAM, CPU and analog blocks reside on a single chip” as recited in independent Claim 1, or “A multi-functional device comprising: a plurality of analog blocks arranged in an array having multiple columns and rows, ... wherein analog blocks in a column are each coupled to a digital bus” as recited in independent Claim 17.

Therefore, Applicants respectfully submit that Ryan and Anderson or Ryan and Swanson, alone or in combination, do not show or suggest the claimed features of the present invention as recited in independent Claims 1 and 17. As such, Applicants also respectfully submit that Ryan and Anderson or Ryan and Swanson, alone or in combination, do not show or suggest the additional claimed features of the present invention as recited in Claims 5 and 20, and that Claims 5 and 20 are in condition for allowance as being dependent on allowable base claims. As such, the Applicants respectfully assert that the basis for rejecting Claims 5 and 20 under 35 U.S.C. § 103(a) is traversed.

#### Claims 7 and 21

The instant Office Action states that Claims 7 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ryan in view of Gorecki (U.S. Patent No. 5,574,678). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 7 and 21 is not shown or suggested by Ryan and Gorecki, alone or in combination.

Claim 7 is dependent on Claim 1 and recites additional limitations. Claim 21 is dependent on Claim 17 and recites additional limitations. As presented above, Applicants respectfully submit that Ryan does not show or suggest the present invention as recited in Claims 1 and 17.

Applicants respectfully submit that Gorecki does not overcome the shortcomings of Ryan. Specifically, Applicants respectfully submit that Gorecki, alone or in combination with Ryan, does not show or suggest “A multi-functional device comprising: a bus; a random access memory (RAM) coupled to said bus; a central processing unit (CPU) coupled to said bus; and a plurality of analog blocks coupled to said bus, wherein said bus, RAM, CPU and analog blocks reside on a single chip” as recited in independent Claim 1, or “A multi-functional device comprising: a plurality of analog blocks arranged in an array having multiple columns and rows, ... wherein analog blocks in a column are each coupled to a digital bus” as recited in independent Claim 17.

Therefore, Applicants respectfully submit that Ryan and Gorecki, alone or in combination, do not show or suggest the claimed features of the present invention as recited in independent Claims 1 and 17, and that these claims are in condition for allowance. As such, Applicants also respectfully submit that Ryan and Gorecki, alone or in combination, do not show or suggest the additional claimed features of the present invention as recited in Claims 7 and 21, and that Claims 7 and 21 are in condition for allowance as being dependent on allowable base claims. As such, the Applicants respectfully

assert that the basis for rejecting Claims 7 and 21 under 35 U.S.C. § 103(a) is traversed.

### Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-13 and 15-23 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

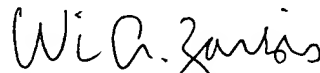
The references cited but not relied upon have been reviewed. These references were not found to show or suggest the present claimed invention: U.S. Patent Nos. 6,614,260 and 6,003,054.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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